

# Committee on Resources,

## Subcommittee on Fisheries Conservation, Wildlife & Oceans

[fisheries](#) - - Rep. Wayne Gilchrest, Chairman

U.S. House of Representatives, Washington, D.C. 20515-6232 - - (202) 226-0200

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### Witness Statement

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STATEMENT OF  
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BEFORE  
THE SUBCOMMITTEE ON FISHERIES CONSERVATION, WILDLIFE, AND OCEANS  
OF THE  
U.S. HOUSE OF REPRESENTATIVES COMMITTEE ON RESOURCES  
MAY 24, 2001

Mr. Chairman and Subcommittee members, I am Richard Burroughs, a marine policy professor from the University of Rhode Island. In the past, I have written about policy and management related to coastal and marine resources. As you know, the Coastal Zone Management Act that you are considering reauthorizing today is one of the central elements of this universe. As a student, I was pleased to participate in a scientific conference on critical problems of the coastal zone that predated the original passage of this legislation in 1972. A few years ago through the Urban Institute, I contributed to an evaluation of a companion coastal program, and, most recently, I wrote sections of the Pew Oceans Commission report on Marine Pollution.

#### Nutrient Pollution of Coastal Waters

The Pew Oceans Commission report on marine pollution devoted considerable attention to nutrients such as nitrogen and phosphorous which, in excess amounts, cause problems for coastal waters. The sequence, well known to people in this room, is that plentiful nutrients trigger bursts in primary production and other shifts in ecosystem health which result in impacts from harmful algal blooms to low oxygen in bottom waters. The former can affect human health through *Pfiesteria* or other means and the latter disrupts ecosystems and organisms that people depend upon for recreation or commercial harvest.

A primary contribution of the Pew report was to summarize the literature concerning nutrients and their impacts. Most commonly the culprit is nitrogen. Potential sources of nitrogen to coastal waters include urban runoff, agriculture, and the atmosphere which are all diffuse nonpoint sources. The final group, the point sources, consist of sewage treatment plants and other pipe discharges. Identifying estimated sources of nitrogen for individual estuaries allows government to target those causes for which the greatest chance for improvement exists. For example, Narragansett Bay in Rhode Island appears to be dominated by point sources. In contrast, agriculture is the most important source of nitrogen to Chesapeake Bay, and atmospheric sources dominate in Barnegat Bay, New Jersey.

Knowing the sources of nitrogen being added to coastal waters has a vast and important impact on governmental program design. This reauthorization could use that information to good effect. Directing nutrient reduction activities to those geographic areas where legislative authorities allow control of a known

source would be most successful. Targeting the largest and most governable sources makes sense, much in the way that only certain communities may participate in urban development programs. Thus, because point sources and atmospheric sources are covered by other legislation, the best use of coastal zone management authorities may be directed to agriculture and diffuse urban runoff that affect coastal areas.

Provisions of this type are compatible with the coastal community conservation grant sections of Mr. Saxton's H.R. 897 and your own discussion draft. By matching a current scientific understanding of cause with additional legislative direction in the coastal community grants, more environmentally effective management will result.

### Evaluation of State Coastal Zone Management Program Outcomes

Now I'll consider evaluation. You noted that evaluation of the implementation of coastal zone management plans in the states requires new attention. Both section 111 of the discussion draft and section 108 of H.R. 897 identify the need for measurable outcome indicators for each of the management objectives noted in the law as it is today.

Those current objectives include expediting the process of governmental decisionmaking, coordinating with federal agencies and local government as well as the public, assisting in planning for living marine resources and for land subsidence as well as sea level rise. These program outputs must, of necessity, precede specific actions. However, they fall into the category of plans as opposed to tangible actions to affect environmental quality. Evaluation of plans and processes, while desirable, is not as salient as evaluation of actions.

Thus, focusing on other objectives embodied in the law that are more action oriented will produce greater progress. The latter constitute program outcomes. They include protection of natural resources and minimization of the loss of life and property in areas vulnerable to hazards. Furthermore, state programs are to give priority to public access and to respect the needs of coastal-dependent uses such as ports, recreation, and energy developments. Finally, assistance for redevelopment of urban waterfronts and ports as well as coastal development to protect the quality of waters and resources (wetlands, beaches, reefs, fish and wildlife) are also specifically identified. These outcome oriented management goals are clearly the most important but complex.

The complexity arises because at times the objectives may be viewed as incompatible. For example harmonizing coastal-dependent industrial facilities with protection of natural resources and water quality may be difficult because individual interests demand ever larger shares of a limited coastal zone.

A major analytical opportunity to address this apparent incompatibility would be to assess the success in reaching these separate objectives as described in detail below. Next the effect of individual objective achievement in multiple states could be analyzed in terms of impacts on the coast. Finally, as a part of the next reauthorization, the Congress could reflect upon the impact of the program on the nation's coast and adjust objectives, if needed.

Previous evaluations include state specific section 312 reviews and national CZM effectiveness studies. Both have struggled with the challenge of establishing appropriate analytical protocols and acquiring data. The structure proposed in the discussion draft and bill significantly advances the strategy to accomplish better assessment. I wish to add some additional details concerning development of measures and use of results.

First, the Congress through this reauthorization can anticipate who will use the results of the evaluation and how this will be done. An important context for this is the Government Performance and Results Act. In specific, performance by outcome management objective will be determined on a state by state basis using the mutually agreed upon performance measures. Thus, the state agencies will both define and utilize the results of the evaluation.

Second, a detailed process for the derivation of performance measures is necessary. Each state CZM agency will nominate separate performance indicators for management objectives related to program outputs. A parallel but separate research exercise will result in the independent development of output indicators. Then the composite list with explanations will be assembled by NOAA and released for state and public review. These results are consistent with the 24 month deadline in the proposed legislation.

Third, the national composite picture will be established from an aggregation of state performance measures by outcome objective. Each of the output objectives would have state specific performance reported. NOAA would respond to the Congress at the 48 month deadline with both state performance and a national aggregation of results by objective.

Finally, achievement of the above would lay the groundwork for two important changes. Once the performance measures by objective are identified, program implementation could go forward with the requirement that funding be contingent upon collection and reporting of performance data. Another change is that prior to the next reauthorization and upon completion of the first iteration of the performance evaluation system, the Congress could conduct a goal/performance review. Informed program and/or goal adjustments will flow from the new performance information.

Thank you for the opportunity to express my views on this important legislation for our coasts and the nation.

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